



CONDUIT AND CABLE SCHEDULE - STAGE II & III SWITCHGEAR CONTROL & INDICATION

CKT. DESIGN.	FROM	TO	SERVICE	CDT.	WIRE
SWITCHGEAR - LOCAL CONTROL CABINET					
LC-1	LOCAL CONTR. CAB.	SWGR. HV-B1	CONTROL	1 1/4"	1-12/C #14
LC-2	LOCAL CONTR. CAB.	SWGR. HV-B2	CONTROL	1 1/4"	1-12/C #14
LC-3	LOCAL CONTR. CAB.	SWGR. HV-B3	CONTROL	1 1/4"	1-12/C #14
LC-4	LOCAL CONTR. CAB.	SWGR. HV-B4	CONTROL	1 1/4"	1-12/C #14

SWITCHGEAR - INTERLOCKING BKRS. HV-B, N, & T					
I-1	SWGR. BKR. T1-3	BKR. HV-B1	240V. A.C.	1 1/2"	1-19/C #14
I-2	SWGR. BKR. T1-2	BKR. HV-B2	240V. A.C.	1 1/2"	1-19/C #14
I-3	SWGR. BKR. T3-4	BKR. HV-B3	240V. A.C.	1 1/2"	1-19/C #14
I-4	SWGR. BKR. T2-4	BKR. HV-B4	240V. A.C.	1 1/2"	1-19/C #14
I-1-2	SWGR. BKR. T1-3	BKR. T1-4	240V. A.C.	1 1/2"	1-19/C #14 & 3-1/C #14
I-3-4	SWGR. BKR. T2-4	BKR. T3-4	240V. A.C.	1 1/2"	1-19/C #14 & 3-1/C #14

REMOTE INDICATION					
T1-1	TRANSF. TR-1	BKR. N-1	DIP N-1	3/4"	8 #14
T2-1	TRANSF. TR-2	BKR. N-2	DIP N-2	3/4"	8 #14
T3-1	TRANSF. TR-3	BKR. N-3	DIP N-3	3/4"	8 #14
T4-1	TRANSF. TR-4	BKR. N-4	DIP N-4	3/4"	8 #14
UPS-1	U.P.S.	CB-R1	DIP R-1	3/4"	4 #14
LC-1	LOCAL CONTROL CAB.	CB-L3	DIP L-3	3/4"	2 #14

DIGITAL INSTRUMENT PACKAGE (DIP)					
S-1	NOTE: FOR CONNECTION SEE DWG. E-103, SCADA COMMUNICATIONS WIRING DIAGRAM			3/4"	1-2pr TW SH
S-2				3/4"	2-2pr TW SH

AUTOMATIC TRANSFER SW. CONTROL CDT.					
C-G	EXIST. TERM. CAB. IN ELEC. CL. "C"	TERM. CAB. #ATS-41A	120V	1 1/4"	23 #12
C-N	TERM. CAB. #ATS-41A	TERM. CAB. #ATS-41N	120V	1 1/4"	22 #12
C-S	TERM. CAB. #ATS-41N	ATS-41NR	120V	1"	16 #12
C-B	TERM. CAB. #ATS-41N	ATS-41NL	120V	1"	16 #12
C-IN	TERM. CAB. #ATS-41N	EXIST. J.B.	120V	3/4"	5 #12
C-SE	TERM. CAB. #ATS-41A	EXIST. JB SHUTTLE ELEV. MACH. RM.	120V	3/4"	7 #12
C-BE	TERM. CAB. #ATS-41A	EXIST. JB BANK ELEV. MACH. RM.	120V	3/4"	7 #12
C-3N	TERM. CAB. #ATS-41N	CB-R1	120V	3/4"	8 #12

PANEL CP-41-N CONDUIT AND CABLE SCHEDULE

CDT. DESIGNATION	CKT. No	WIRE No & SIZE	TYPE	CONDUIT SIZE
CP-41N-1	1	2 #12 1 #12	XHHW-2 GND.	3/4" C.
CP-41N-2	2	2 #12 1 #12	XHHW-2 GND.	3/4" C.
CP-41N-7	7	2 #8 1 #10	XHHW-2 GND.	3/4" C.
CP-41N-8	8	2 #8 1 #10	XHHW-2 GND.	3/4" C.
CP-41N-9	9	2 #8 1 #10	XHHW-2 GND.	3/4" C.
CP-41N-10	10	2 #8 1 #10	XHHW-2 GND.	3/4" C.
CP-41N-11	11	2 #10 1 #12	XHHW-2 GND.	3/4" C.
CP-41N-12	12	2 #12 1 #12	XHHW-2 GND.	3/4" C.
CP-41N-13	13	2 #10 1 #10	XHHW-2 GND.	3/4" C.
CP-41N-14	14	2 #10 1 #10	XHHW-2 GND.	3/4" C.
CP-41N-15	15	2 #10 1 #10	XHHW-2 GND.	3/4" C.
CP-41N-16	16	2 #10 1 #10	XHHW-2 GND.	3/4" C.

NOTE:

- THIS DRAWING SHOWS BOTH STAGE II AND III WORK COMBINED. FOR SEPARATION OF WORK SEE NOTE #3 DWG. #E-11.
- FOR WORK IN ELECTRIC CLOSET "C" SEE DRAWING E-12, ONE LINE DIAGRAM
- FOR LOCAL CONTROL PANEL DETAILS SEE DRAWING E-107

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF ONE OF THE CONTRACT DRAWINGS CONSTITUTING A PART OF CONTRACT NO. WTC-802.071 IN THE FORM IN WHICH SAID DRAWINGS EXISTED AT THE TIME THE SAID CONTRACT WAS EXECUTED BY THE PARTIES.

DATE 6/21/95 *William A. Aslam*
SPEC. WRITER
DATE 8/5/95 *Peter K. Swamy*
ENGINEER OF DESIGN

Sheet 101 of 224

THE PORT AUTHORITY
OF NY & NJ

Peter K. Swamy
ENGINEERING PROGRAM MANAGER
WORLD TRADE CENTER
CHIEF ELECTRICAL ENGINEER

Engineering Department
Design Division

The World Trade
Center
Electrical/HVAC
Upgrade Program

TOWER ONE AND TWO
LOW VOLTAGE
SUBSTATIONS
CONSTRUCTION AND
INSTALLATION

ELECTRICAL
SUBSTATION SS-41N
STAGE II AND III
41st FLOOR PLAN
CONTROL CDT. LAYOUT

No. Date Revision Approved

This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.

LEAHY/
FISCHER
Designed by
LEAHY
Drawn by
A.S.
Checked by

Date 5-1-95 Scale AS NOTED

Contract Number
WTC 802.071
Drawing Number
E-15